



SECRET

Log No. 302-S

Copy # 4 of 4 copies

ELECTRONIC SYSTEMS

966 Commercial Street
Palo Alto, California
DAvenport 1-4175

December 30, 1959

REGISTERED - RETURN RECEIPT REQUESTED

6/61

25X1

In accordance with your request, I would like to propose that the following tests be made on the first Model 504B Deceptive Repeater.

1. A group of about ten low altitude runs using the F3H in a straight tail approach should be made. The F3H radar should be locked on at a range of about 10 miles, and lock should be maintained into as close a range as possible. Sufficient calibration runs should be used to insure that the radar is operating properly. The F3H should be equipped with a scope camera, and the pilot's comments should be recorded at the debriefing.

Data accumulated from the above runs should allow an estimate to be made as to the effectiveness of the increased output power of the Model 504B.

2. A group of about four high altitude runs using the F106 should be made to insure that no voltage breakdown or cooling problems exist.

I do not believe that it is necessary to make any airborne tests of the operation of the Model 504B in the CW mode. The levels involved in CW operation are such that the 504B is never driven to full output power, so that the increased output power capability is no advantage in this mode.

After the first 504B has been tested and accepted I would recommend that the following units be tested by making one or two low altitude runs against either the F3H or the F102.

I hope that this test program will meet with your approval. If any questions arise, we will be happy to discuss them with you.

Sincerely,

25X1

25X1

LDS:jb

SECRET